Amendments to the Claims:

Claims 1, 2, 6 and 10 are amended and claims 13 to 33 are added as set forth hereinafter.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) An optical arrangement disposed with respect to an optical axis, the optical arrangement comprising:

a plane perpendicular to said optical axis;

a light source for generating a light beam along said optical axis and the light of said light beam in said plane being polarized either tangentially to said optical axis or radially with respect to said optical axis and the light of said light beam having a wavelength of 157 nm or 193 nm;

at least one lens mounted in or next to said plane;

said lens being made of single-axis, double-refracting crystalline material defining an optical crystal axis; and,

said optical crystal axis being aligned parallel to said optical axis of said optical arrangement.

2. (Currently Amended) The optical arrangement of claim 1, wherein said single-axis, double-refracting crystalline material of said lens is MgF_2.

3. (Previously Presented) The optical arrangement of claim 1, wherein said plane is a pupillary plane.

4. (Previously Presented) The optical arrangement of claim 1, wherein said lens takes up said light beam with a numerical aperture of up to 0.1.

5. (Previously Presented) The optical arrangement of claim 1, wherein said light source is a laser and said laser includes a resonator for coupling out tangentially or radially polarized light.

6. (Currently Amended) The optical arrangement of claim 1, wherein said lens is a first lens and said material is a first ~~material,~~ material; and, said optical arrangement further comprising at least a second lens made of a second material different than that of said first material.

7. (Previously Presented) The optical arrangement of claim 6, wherein said second material is crystal.

8. (Previously Presented) The optical arrangement of claim 7, wherein said crystal is CaF_2.

9. (Previously Presented) The optical arrangement of claim 7, wherein said crystal is BaF_2.

10. (Currently Amended) A microlithographic projection exposure

system defining an optical axis, said system comprising:

a UV light source for generating a light beam along said optical axis with the light of said light beam having a wavelength of 157 nm or 193 nm;

an illumination system arranged on said optical axis downstream of said UV light source for receiving and processing the light beam of said UV light source;

a projection objective arranged downstream of said illumination system; and,

one of said illumination system and said projection objective including an optical arrangement; and,

said optical arrangement including:

a plane perpendicular to said optical axis;

the light of said light beam in said plane being in a polarized state either tangentially to said optical axis or radially with respect to said optical axis;

at least one lens mounted in or next to said plane;

said lens being made of single-axis, double-refracting crystalline material defining an optical crystal axis; and,

said optical crystal axis being aligned parallel to said optical axis of said optical arrangement.

11. (Previously Presented) The system of claim 10, wherein said single-axis, double-refracting material of said lens is MgF_2.

12. (Previously Presented) The system of claim 10, wherein said plane is a pupillary plane.

13. (New) An optical arrangement disposed with respect to an optical axis, the optical arrangement comprising:

a plane perpendicular to said optical axis;

a light source for generating a light beam along said optical axis and the light of said light beam in said plane being polarized either tangentially to said optical axis or radially with respect to said optical axis;

at least one lens mounted in or next to said plane;

said lens being made of single-axis, double-refracting crystalline material defining an optical crystal axis;

said optical crystal axis being aligned parallel to said optical axis of said optical arrangement; and,

said lens taking up said light beam with a numerical aperture of up to 0.1.

14. (New) The optical arrangement of claim 13, wherein said single-axis, double-refracting crystalline material of said lens is MgF_2.

15. (New) The optical arrangement of claim 13, wherein said plane is a pupillary plane.

16. (New) The optical arrangement of claim 13, wherein said light source is a laser and said laser includes a resonator for coupling out tangentially or radially polarized light.

17. (New) The optical arrangement of claim 13, wherein said lens is a first lens and said material is a first material; and,

said optical arrangement further comprising at least a second lens made of a second material different than that of said first material.

18. (New) The optical arrangement of claim 17, wherein said second material is crystal.

19. (New) The optical arrangement of claim 18, wherein said crystal is CaF_2.

20. (New) The optical arrangement of claim 18, wherein said crystal is BaF_2.

21. (New) An optical arrangement disposed with respect to an optical axis, the optical arrangement comprising:

a plane perpendicular to said optical axis;

a light source for generating a light beam along said optical axis and the light of said light beam in said plane being polarized either tangentially to said optical axis or radially with respect to said optical axis;

at least one lens mounted in or next to said plane;

said lens being made of single-axis, double-refracting crystalline material defining an optical crystal axis;

said optical crystal axis being aligned parallel to said optical axis of said optical arrangement;

said lens being a first lens and said material being a first material; and, said optical arrangement further comprising at least a second lens made of a second material different than that

of said first material;

said second material being crystal; and,

said crystal being CaF_2.

22. (New) The optical arrangement of claim 21, wherein said single-axis, double-refracting crystalline material of said lens is MgF_2.

23. (New) The optical arrangement of claim 21, wherein said plane is a pupillary plane.

24. (New) The optical arrangement of claim 21, wherein said lens takes up said light beam with a numerical aperture of up to 0.1.

25. (New) The optical arrangement of claim 21, wherein said light source is a laser and said laser includes a resonator for coupling out tangentially or radially polarized light.

26. (New) An optical arrangement disposed with respect to an optical axis, the optical arrangement comprising:

a plane perpendicular to said optical axis;

a light source for generating a light beam along said optical axis and the light of said light beam in said plane being polarized either tangentially to said optical axis or radially with respect to said optical axis;

at least one lens mounted in or next to said plane;

said lens being made of single-axis, double-refracting

crystalline material defining an optical crystal axis;

said optical crystal axis being aligned parallel to said optical axis of said optical arrangement;

said lens being a first lens and said material being a first material; and, said optical arrangement further comprising at least a second lens made of a second material different than that of said first material;

said second material being crystal; and,

said crystal being BaF_2.

27. (New) The optical arrangement of claim 26, wherein said single-axis, double-refracting crystalline material of said lens is MgF_2.

28. (New) The optical arrangement of claim 26, wherein said plane is a pupillary plane.

29. (New) The optical arrangement of claim 26, wherein said lens takes up said light beam with a numerical aperture of up to 0.1.

30. (New) The optical arrangement of claim 26, wherein said light source is a laser and said laser includes a resonator for coupling out tangentially or radially polarized light.

31. (New) A microlithographic projection exposure system defining an optical axis, said system comprising:

a UV light source for generating a light beam along said

optical axis;

an illumination system arranged on said optical axis downstream of said UV light source for receiving and processing the light beam of said UV light source;

a projection objective arranged downstream of said illumination system; and,

one of said illumination system and said projection objective including an optical arrangement; and,

said optical arrangement including:

a plane perpendicular to said optical axis;

the light of said light beam in said plane being in a polarized state either tangentially to said optical axis or radially with respect to said optical axis;

at least one lens mounted in or next to said plane;

said lens being made of single-axis, double-refracting crystalline material defining an optical crystal axis;

said optical crystal axis being aligned parallel to said optical axis of said optical arrangement; and,

said lens taking up said light beam with a numerical aperture of up to 0.1.

32. (New) A microlithographic projection exposure system defining an optical axis, said system comprising:

a UV light source for generating a light beam along said optical axis;

an illumination system arranged on said optical axis downstream of said UV light source for receiving and processing the light beam of said UV light source;

a projection objective arranged downstream of said illumination system; and,

one of said illumination system and said projection objective including an optical arrangement; and,

said optical arrangement including:

a plane perpendicular to said optical axis;

the light of said light beam in said plane being in a polarized state either tangentially to said optical axis or radially with respect to said optical axis;

at least one lens mounted in or next to said plane;

said lens being made of single-axis, double-refracting crystalline material defining an optical crystal axis;

said optical crystal axis being aligned parallel to said optical axis of said optical arrangement;

said lens being a first lens and said material being a first material; and, said optical arrangement further comprising at least a second lens made of a second material different than that of said first material;

said second material being crystal; and,

said crystal being CaF_2.

33. (New) A microlithographic projection exposure system defining an optical axis, said system comprising:

a UV light source for generating a light beam along said optical axis;

an illumination system arranged on said optical axis downstream of said UV light source for receiving and processing the light beam of said UV light source;

a projection objective arranged downstream of said illumination system; and,

one of said illumination system and said projection objective including an optical arrangement; and,

said optical arrangement including:

a plane perpendicular to said optical axis;

the light of said light beam in said plane being polarized either tangentially to said optical axis or radially with respect to said optical axis;

at least one lens mounted in or next to said plane;

said lens being made of single-axis, double-refracting crystalline material defining an optical crystal axis;

said optical crystal axis being aligned parallel to said optical axis of said optical arrangement;

said lens being a first lens and said material being a first material; and, said optical arrangement further comprising at least a second lens made of a second material different than that of said first material;

said second material being crystal; and,

said crystal being BaF_2.